

AMENDMENTS TO THE CLAIMS

Please replace the claims as filed with the following list of claims.

Claim 1. An apparatus for the intensification of the production of high-viscosity oils which contains the a unit of for ultrasonic excitation of the a well bottom zone that consists of a surface ultrasonic generator and at least one ultrasonic magnetostrictive radiator placed at the an end of oil-well tubing (OWT), which are electrically connected with each other by two cords of a three-cord electrical cable, and the a unit of the for heating of OWT-oil well tubing that consists of a surface high-frequency generator and the a line of for the OWT-oil well tubing heating, which is distributed along the entire length of OWT-oil well tubing and heats oil well tubing by high-frequency currents, said line including the a third cord of the three-cord electrical cable.

Claim 2. The apparatus of claim 1, wherein the unit of the OWT heating the for heating of oil well tubing includes a surface high-frequency generator on the a daylight is surface, said high frequency generator being electrically connected by a grounded wire to OWT-oil well tubing, which is electrically insulated from the a casing pipe of a well, and at the place of the a location of the said ultrasonic magnetostrictive radiator, the surface high-frequency generator is connected to OWT-oil well tubing by the third cord of the three-cord electrical cable.

Claim 3. An apparatus of claim 2, wherein the ultrasonic magnetostrictive magnetostrictive radiator whose has an inside diameter that matches the OWT-oil well tubing inside diameter.

Claim 4. An apparatus of claim 3, wherein the ultrasonic magnetostrictive magnetostrictive radiator is made in the form of a hollow cylinder or similar shape.

Claim 5. An apparatus of claim 1, wherein the unit of the OWT-oil well tubing heating unit includes one output of the surface high-frequency generator is connected on the a daylight surface to a first one of the output[s] of the surface ultrasonic generator and the one cord of the three-cord electrical cable which is connected to this first output is a common cord for both generators, and the a second output of the surface high-frequency generator is connected, by the third cord of the three-cord electrical cable at the place of the location of the ultrasonic magnetostrictive radiator, to the said common cord of said three-cord electrical cable.

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Claim 6. An apparatus of claim 5, wherein the said line of the for OWT oil well tubing heating, by high-frequency currents, further contains at least two inductors placed on OWT oil well tubing and connected to the said third cord of the three-cord electrical cable.

Claim 7. An apparatus of claim 6, wherein the ultrasonic magnetoelectric magnetostrictive radiator whose has an inside diameter that matches the an OWT oil well tubing inside diameter.

Claim 8. An apparatus of claim 7, wherein the ultrasonic magnetoelectric magnetostrictive radiator is made in the form of a hollow cylinder or similar shape.

Claim 9. A method for intensification of production of high-viscosity oils, in which the viscosity of oil in the a well bottom zone is decreased by the effect applying of a high-power ultrasonic field on it, said well bottom zone and in addition, providing the heating of the well bottom zone, and maintaining the achieved decreased viscosity of oil during its transportation to the daylight surface through the heating of oil-well tubing (OWT) by high-frequency currents.

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